### **CPAP COMPETENCY TEST SCENARIOS**

Instructions: These are sample scenarios to use with the CPAP skills check off. Expand on them as needed. Each scenario should have a complication/challenge to resove after CPAP is applied, if it is indicated.

Each EMT/Paramedic is expected to make an accurate assessment of a patient in respiratory distress and determine whether or not they are a candidate for CPAP. They must then competently apply mask CPAP and monitor the patient appropriately.

Read the chosen scenario and additional information as requested by the EMT/Paramedic. Have another individual act the role of the patient and simulate the physical findings.

#### **Scenario One**

**Dispatch:** 65 y/o Male c/o of shortness of breath

**HPI:** 1 week h/o progressive dyspnea with exertion. Unable to lay down flat without

shortness of breath, no chest pain or cough.

PmHx: Hypertension, Diabetes

**Medications:** Lasix, Atenolol, and Glucaphage **Physical Exam:** 260 lb woman sitting in recliner.

Vital Signs: BP 100/80, HR 140 sinus tachycardia, RR 38, O2 sat 58%, LOC does

not follow commands, cannot hold self up, airway patent

**HEENT:** Cyanosis, JVD present

**Pulmonary:** Silent Chest

Extremities: Cyanotic, 3+ pedal edema

After CPAP started:

• 5 min Vital Signs: HR 100, RR 24, BP 100/60, O2 sat 84%, LOC Verbal stimuli

• 10 min Vital Signs: HR 30, RR 6, BP 60/40, O2 sat 60%, LOC Unresponsive (complication- Hypotension)

# Scenario Two

**Dispatch:** You are called to a 54 y/o woman c/o breathing problems **HPI:** Increasing shortness of breath for 1 day despite the use of inhalers.

PmHx: COPD, Hypertension, and Diabetes

**Medications:** Albuterol Inhaler, Lasix, and Aspirin

Physical Exam: Thin white female on home oxygen breathing through pursed lips

sitting in a tripod position.

**Vital Signs:** BP 180/90, HR 120 sinus tachycardia, RR 30, O2 sat 88%, LOC alert, airway patent.

**HEENT:** Perioral cyanosis, no JVD

**Pulmonary:** Lung auscultation reveals inspiratory and expiratory wheezes.

The patient has 3 word speech dyspnea. **Extremities:** Cyanotic, no pedal edema

### After CPAP started:

- 5 min Vital Signs: HR 130, RR 24, BP 160/90, O2 sat 92%, LOC Alert
- 10 min Vital Signs: HR 140, RR, 38, BP 100/40, O2 sat 72%, LOC Alert, complaining of increasing SOB and chest pain (Complication: Pneumothorax)

## **Scenario Three**

**Dispatch:** 65 y/o man c/o of shortness of breath

**HPI:** 1 week h/o progressive dyspnea with exertion. Unable to lay down flat without

shortness of breath, no chest pain or cough.

**PmHx:** Hypertension, Diabetes

**Medications:** Lasix, Atenolol, and Glucaphage **Physical Exam:** 260 lb woman sitting in recliner.

Vital Signs: BP 100/80, HR 140 sinus tachycardia, RR 30, O2 sat 78%, LOC follows

commands, airway patent

**Pulmonary:** Rales in all lung fields **Extremities:** Cyanotic, 3+ pedal edema

After CPAP started:

Due to the patients altered LOC and profound respiratory fatigue, the patient is not a candidate for CPAP to begin with. The patient does not respond to CPAP. Intubation is indicated. The EMT/Medic Fails if they do not intubate the patient.

• 5 min Vital Signs: HR 150, RR 40, BP 160/90, O2 sat 54%, LOC poor

10 min Vital Signs: HR 150, RR, 6, BP 100/90, O2 sat ??%, LOC unresponsive